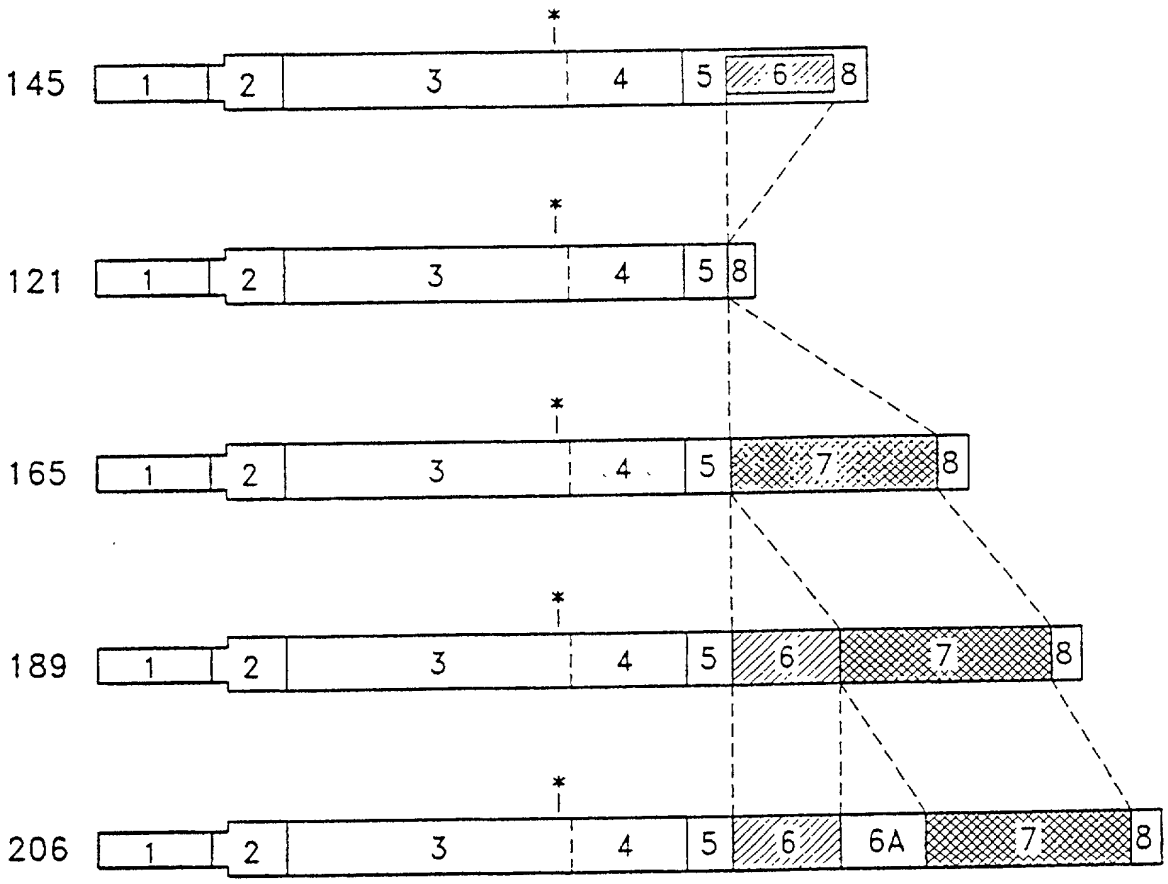
145
1
2
3
4
5
6
8
121
1
2
3
4
5
8
165
1
2
3
4
5
7
8
189
1
2
3
4
5
6
7
8
206
1
2
3
4
5
6
6A
7
8

FIG. 1

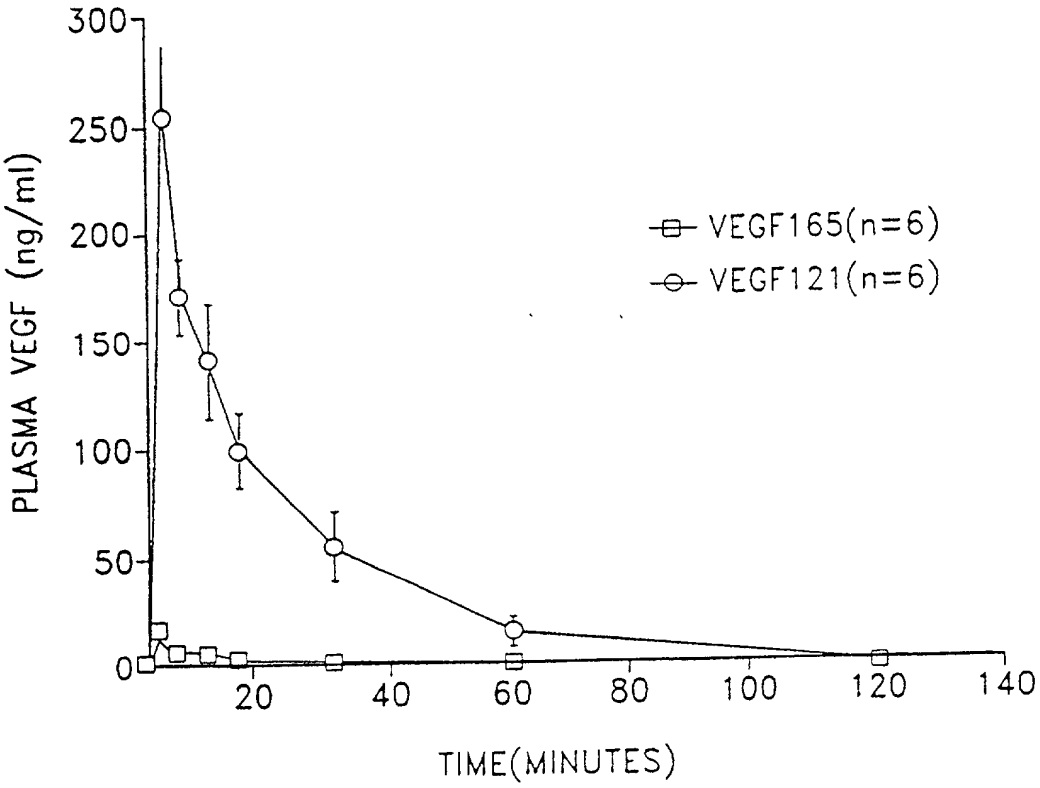
300
250
200
150
100
50
0
PLASMA VEGF (ng/ml)
20
40
60
80
100
120
140
TIME(MINUTES)
VEGF165(n=6)
VEGF121(n=6)

FIG. 2

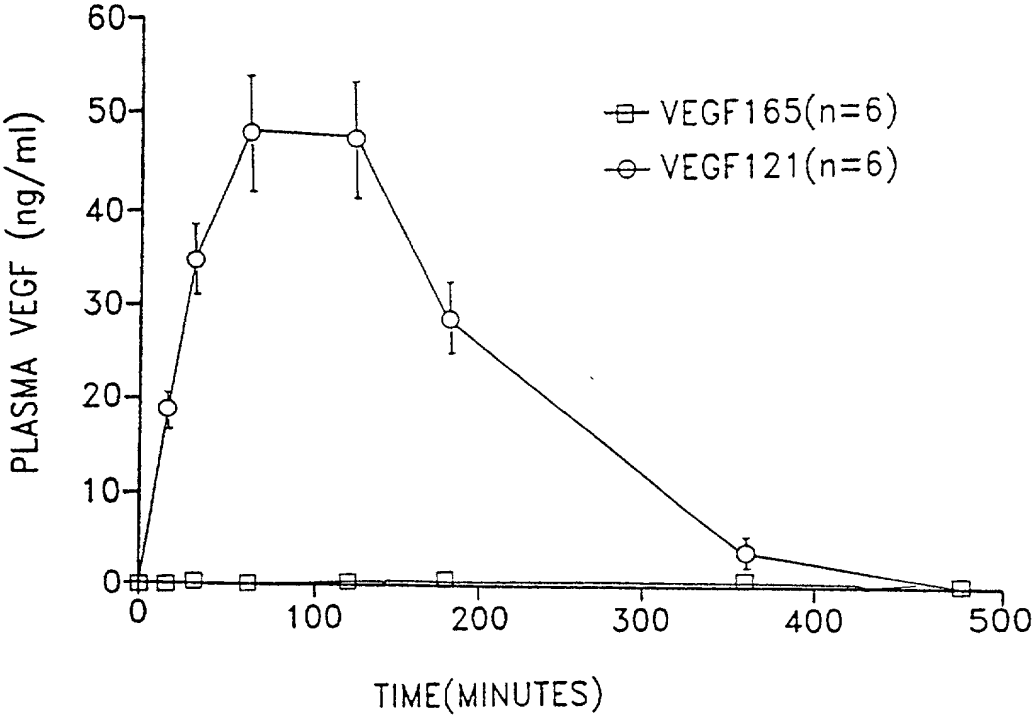
60
50
40
30
20
10
0
PLASMA VEGF (ng/ml)
0
100
200
300
400
500
TIME(MINUTES)
VEGF165(n=6)
VEGF121(n=6)

FIG.3

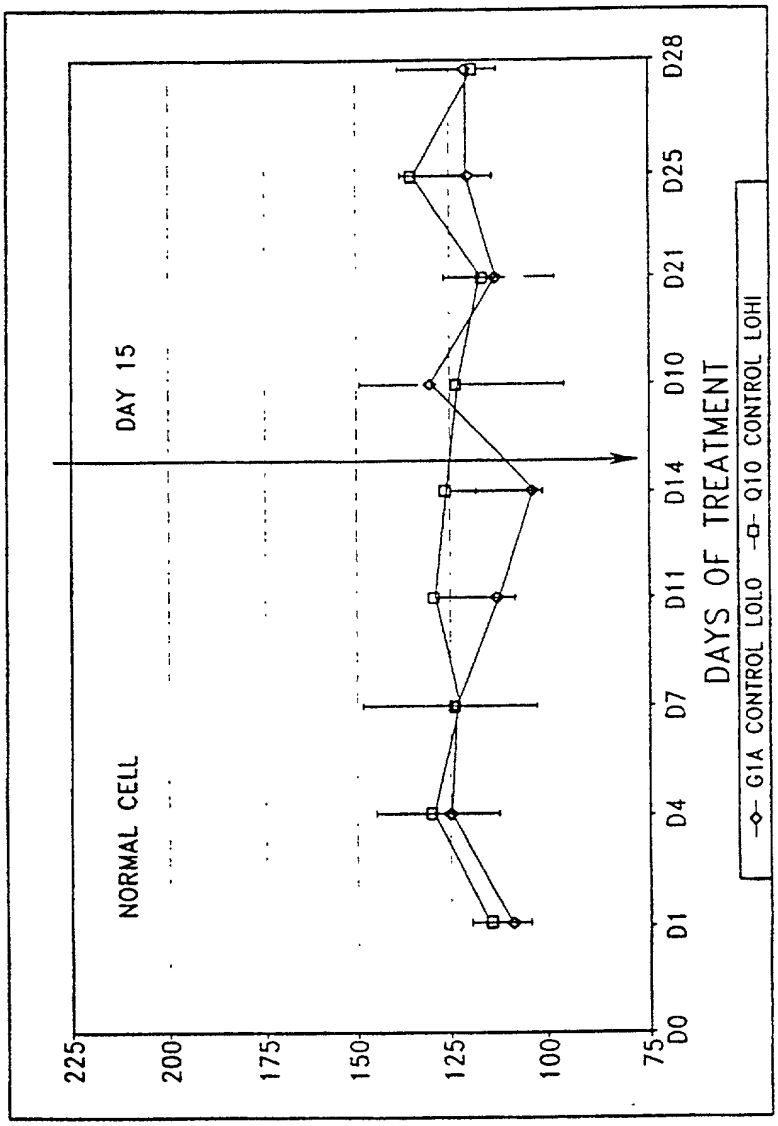
NORMAL CELL
DAY 15
225
200
175
150
125
100
75
D0
D1
D4
D7
D11
D14
D10
D21
D25
D28
DAYS OF TREATMENT
G1A CONTROL LOLO
Q10 CONTROL LOHI

FIG. 4A

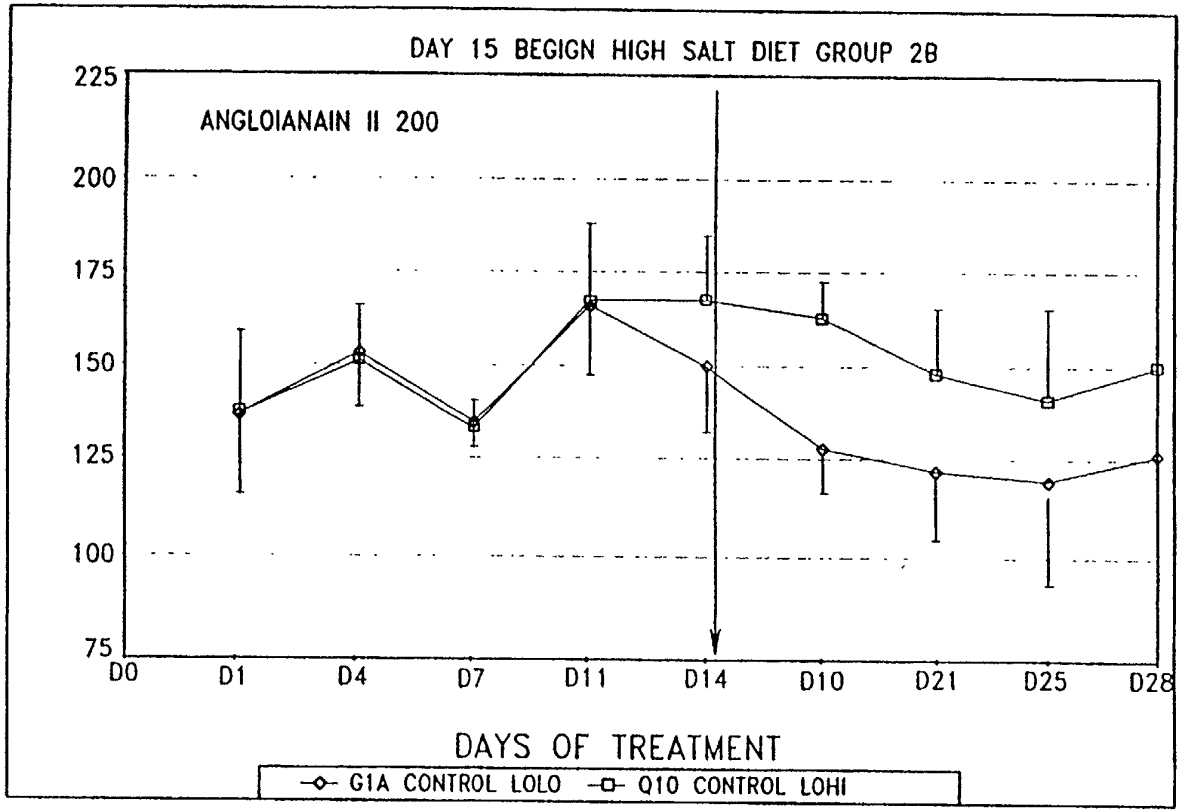
DAY 15 BEGIGN HIGH SALT DIET GROUP 2B
ANGLOIANAIN II 200
225
200
175
150
125
100
75
D0
D1
D4
D7
D11
D14
D10
D21
D25
D28
DAYS OF TREATMENT
G1A CONTROL LOLO
Q10 CONTROL LOHI

FIG.4B

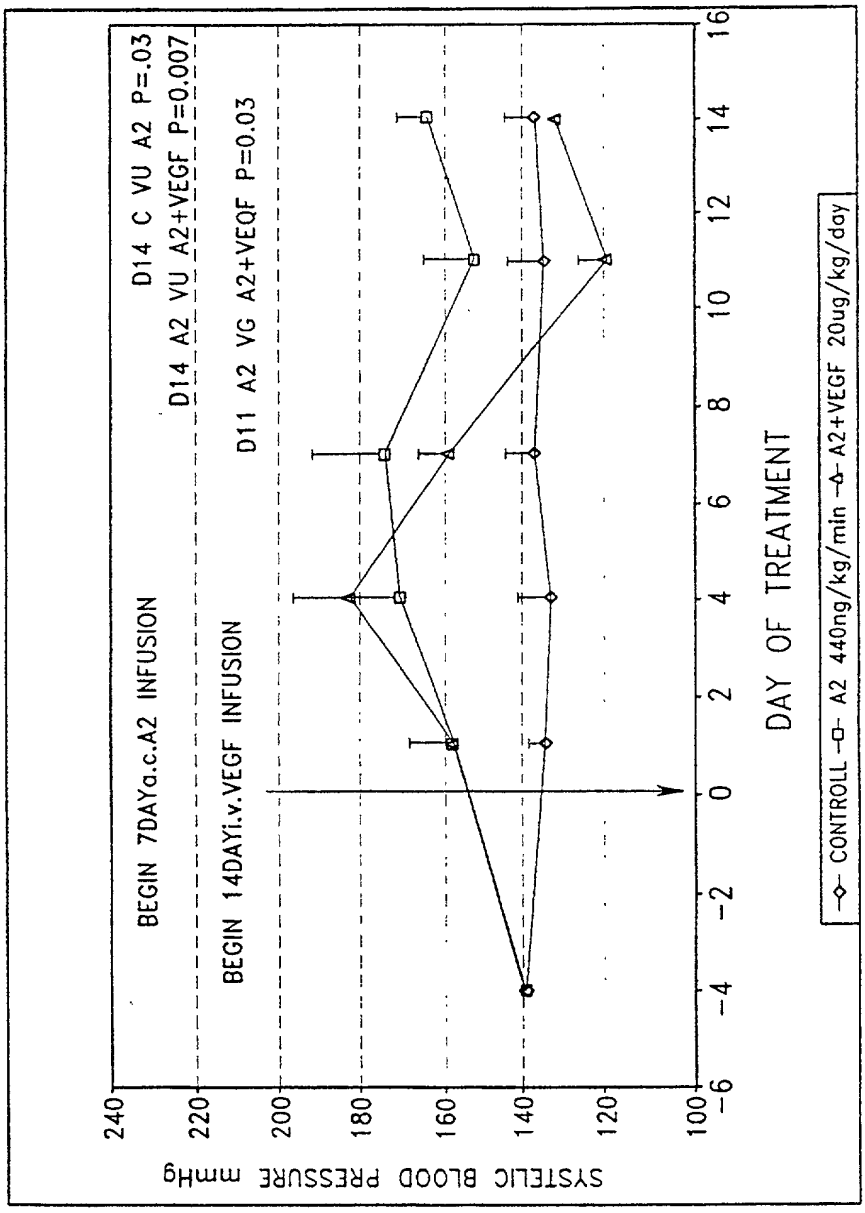
SYSTELIC BLOOD PRESSURE mmHg
240
220
200
180
160
140
120
100
-6
-4
-2
0
2
4
6
8
10
12
14
16
DAY OF TREATMENT
BEGIN 7DAYa.c.A2 INFUSION
BEGIN 14DAYi.v.VEGF INFUSION
D14 C VU A2 P=.03
D14 A2 VU A2+VEGF P=0.007
D11 A2 VG A2+VEQF P=0.03
CONTROLL
A2 440ng/kg/min
A2+VEGF 20ug/kg/day

FIG.4C

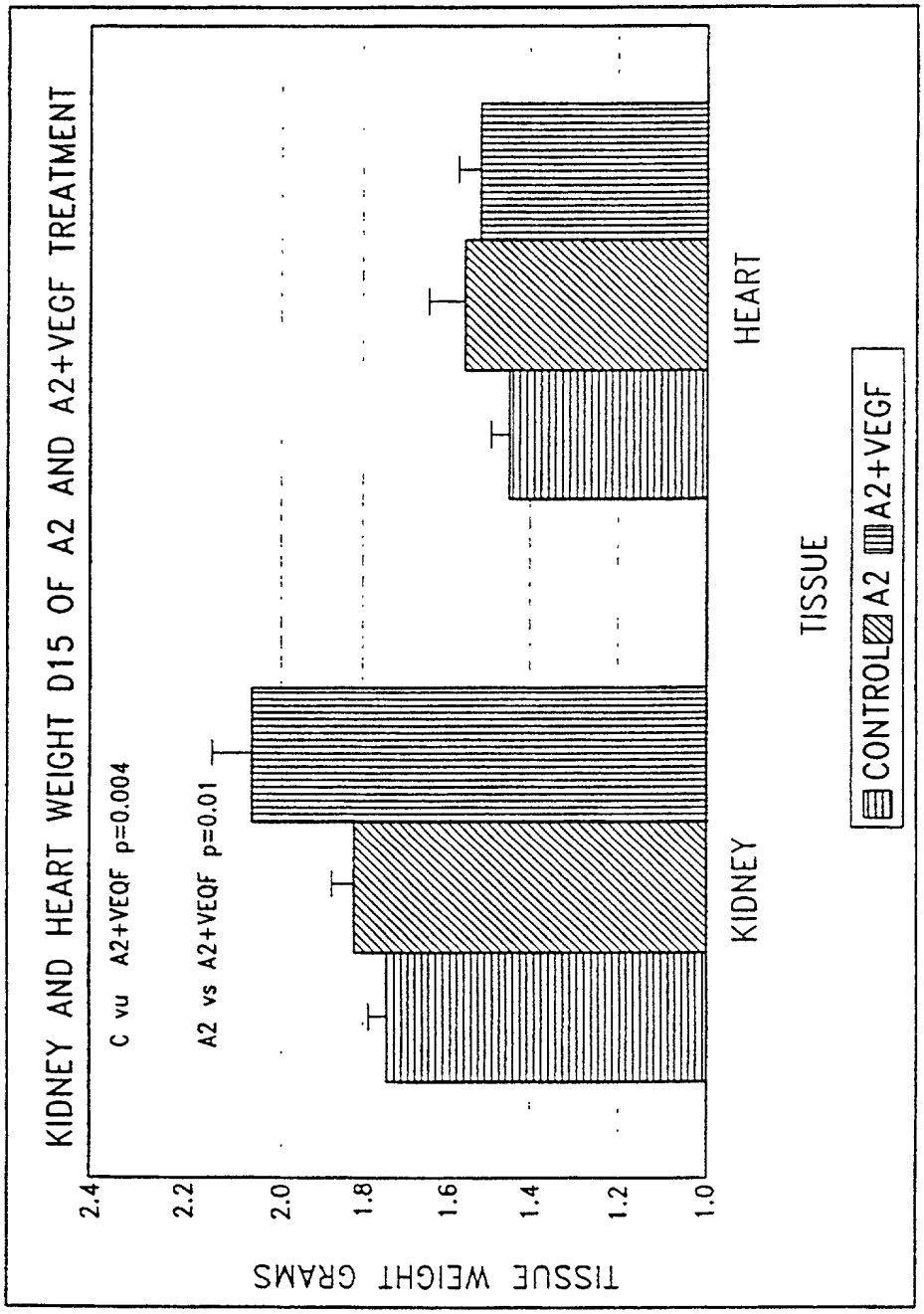
KIDNEY AND HEART WEIGHT D15 OF A2 AND A2+VEGF TREATMENT
C vu A2+VEQF p=0.004
A2 vs A2+VEQF p=0.01
TISSUE WEIGHT GRAMS
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
KIDNEY
HEART
TISSUE
CONTROL
A2
A2+VEGF

FIG.5

hVEGF121

ATGAACTTTCTGCTGTCTTGGGTGCATTGGAGCCTTGCCTTGCTGCTCTACCTCCACCATGCCAA
GTGGTCCCAGGCTGCACCCATGGCAGAAGGAGGAGGGCAGAATCATCACGAAGTGGTGAAGTTCA
TGGATGTCTATCAGCGCAGCTACTGCCATCCAATCGAGACCCTGGTGGACATCTTCCAGGAGTAC
CCTGATGAGATCGAGTACATCTTCAAGCCATCCTGTGTGCCCCTGATGCGATGCGGGGGCTGCTG
CAATGACGAGGGCCTGGAGTGTGTGCCCACTGAGGAGTCCAACATCACCATGCAGATTATGCGGA
TCAAACCTCACCAAGGCCAGCACATAGGAGAGATGAGCTTCCTACAGCACAACAAATGTGAATGC
AGACCAAAGAAAGATAGAGCAAGACAAGAAAAATGTGACAAGCCGAGGCGGTGA

MNFLLSWVHWSLALLLYLHHAKWSQAAPMAEGGGQNHHEVVKFMDVYQRSYCHPIETLVDIFQEY
PDEIEYIFKPSCVPLMRCGGCCNDEGLECVPTEESNITMQIMRIKPHQGQHIGEMSFLQHNKCEC
RPKKDRARQEKCDKPRR

FIG.6

hVEGF145

ATGAACTTTCTGCTGTCTTGGGTGGATTGGAGCCTTGCCTTGCTGCTCTACCTCCACCATGCCAAGTG
GTCCCAGGCTGCACCCATGGCAGAAGGAGGAGGGCAGAATCATCACGAAGTGGTGAAGTTCATGGAT
GTCTATCAGCGCAGCTACTGCCATCCAATCGAGACCCTGGTGGACATCTTCCAGGAGTACCCTGATGA
GATCGAGTACATCTTCAAGCCATCCTGTGTGCCCCTGATGCGATGCGGGGGCTGCTGCAATGACGAG
GGCCTGGAGTGTGTGCCCACTGAGGAGTCCAACATCACCATGCAGATTATGCGGATCAAACCTCACCA
AGGCCAGCACATAGGAGAGATGAGCTTCCTACAGCACAACAAATGTGAATGCAGACCAAAGAAAGATA
GAGCAAGACAAGAAAAAAAATCAGTTCGAGGAAAGGGAAAGGGGCAAAAACGAAAGCGCAAGAAATC
CCGGTATAAGTCCTGGAGCGTATGTGACAAGCCGAGGCGGTGA

APMAEGGGQNHHEVVKFMDVYQRSYCHPIETLVDIFQEYPDEIEYIFKPSCVPLMRCGGCCNDEG
LECVPTEESNITMQIMRIKPHQGQHIGEMSFLQHNKCECRPKKDRARQEKKSVRGKGKGQKRKRK
KSRYKSWSVCDKPRR

FIG.7

Hvegf 165

ATGAACTTTCTGCTGTCTTGGGTGCATTGGAGCCTCGCCTTGCTGCTCTACCTCCACCATGCCAA
GTGGTCCCAGGCTGCACCCATGGCAGAAGGAGGAGGGCAGAATCATCACGAAGTGGTGAAGTTCA
TGGATGTCTATCAGCGCAGCTACTGCCATCCAATCGAGACCCTGGTGGACATCTTCCAGGAGTAC
CCTGATGAGATCGAGTACATCTTCAAGCCATCCTGTGTGCCCCTGATGCGATGCGGGGGCTGCTG
CAATGACGAGGGCCTGGAGTGTGTGCCCACTGAGGAGTCCAACATCACCATGCAGATTATGCGGA
TCAAACCTCACCAAGGCCAGCACATAGGAGAGATGAGCTTCCTACAGCACAACAAATGTGAATGC
AGACCAAAGAAAGATAGAGCAAGACAAGAAAATCCCTGTGGGCCTTGCTCAGAGCGGAGAAAGCA
TTTGTTTGTACAAGATCCGCAGACGTGTAAATGTTCCTGCAAAAACACAGACTCGCGTTGCAAGG
CGAGGCAGCTTGAGTTAAACGAACGTACTTGCAGATGTGACAAGCCGAGGCGGTGA

MNFLLSWVHWSLALLLYLHHAKWSQAAPMAEGGGQNHHEVVKFMDVYQRSYCHPIETLVDIFQEY
PDEIEYIFKPSCVPLMRCGGCCNDEGLECVPTEESNITMQIMRIKPHQGQHIGEMSFLQHNKCEC
RPKKDRARQENPCGPCSERRKHLFVQDPQTCKCSCKNTDSRCKARQLELNERTCRCDKPRR.

FIG.8

Hvegf 189

ATGAACTTTCTGCTGTCTTGGGTGCATTGGAGCCTCGCCTTGCTGCTCTACCTCCACCATGCCAA
GTGGTCCCAGGCTGCACCCATGGCAGAAGGAGGAGGGCAGAATCATCACGAAGTGGTGAAGTTCA
TGGATGTCTATCAGCGCAGCTACTGCCATCCAATCGAGACCCTGGTGGACATCTTCCAGGAGTAC
CCTGATGAGATCGAGTACATCTTCAAGCCATCCTGTGTGCCCCTGATGCGATGCGGGGGCTGCTG
CAATGACGAGGGCCTGGAGTGTGTGCCCACTGAGGAGTCCAACATCACCATGCAGATTATGCGGA
TCAAACCTCACCAAGGCCAGCACATAGGAGAGATGAGCTTCCTACAGCACAACAAATGTGAATGC
AGACCAAAGAAAGATAGAGCAAGACAAGAAAAAAAATCAGTTCGAGGAAAGGGAAAGGGGCAAAA
ACGAAAGCGCAAGAAATCCCGGTATAAGTCCTGGAGCGTGGGGCCTTGCTCAGAGCGGAGAAAGC
ATTTGTTTGTACAAGATCCGCAGACGTGTAAATGTTCCTGCAAAAACACAGACTCGCGTTGCAAG
GCGAGGCAGCTTGAGTTAAACGAACGTACTTGCAGATGTGACAAGCCGAGGCGGTGA

MNFLLSWVHWSLALLLYLHHAKWSQAAPMAEGGGQNHHEVVKFMDVYQRSYCHPIETLVDIFQEY
PDEIEYIFKPSCVPLMRCGGCCNDEGLECVPTEESNITMQIMRIKPHQGQHIGEMSFLQHNKCEC
RPKKDRARQEKKSVRGKGKGQKRKRKKSRYKSWSVPCGPCSERRKHLFVQDPQTCKCSCKNTDSR
CKARQLELNERTCRCDKPRR

FIG.9

Hvegf 206

ATGAACTTTCTGCTGTCTTGGGTGCATTGGAGCCTCGCCTTGCTGCTCTACCTCCACCATGCCAA
GTGGTCCCAGGCTGCACCCATGGCAGAAGGAGGAGGGCAGAATCATCACGAAGTGGTGAAGTTCA
TGGATGTCTATCAGCGCAGCTACTGCCATCCAATCGAGACCCTGGTGGACATCTTCCAGGAGTAC
CCTGATGAGATCGAGTACATCTTCAAGCCATCCTGTGTGCCCCTGATGCGATGCGGGGGCTGCTG
CAATGACGAGGGCCTGGAGTGTGTGCCCACTGAGGAGTCCAACATCACCATGCAGATTATGCGGA
TCAAACCTCACCAAGGCCAGCACATAGGAGAGATGAGCTTCCTACAGCACAACAAATGTGAATGC
AGACCAAAGAAAGATAGAGCAAGACAAGAAAAAAAATCAGTTCGAGGAAAGGGAAAGGGGCAAAA
ACGAAAGCGCAAGAAATCCCGGTATAAGTCCTGGAGCGTGTACGTTGGTGCCCGCTGCTGTCTAA
TGCCCTGGAGCCTCCCTGGCCCCCATCCCTGTGGGCCTTGCTCAGAGCGGAGAAAGCATTTGTTT
GTACAAGATCCGCAGACGTGTAAATGTTCCTGCAAAAACACAGACTCGCGTTGCAAGGCGAGGCA
GCTTGAGTTAAACGAACGTACTTGCAGATGTGACAAGCCGAGGCGGTGA

MNFLLSWVHWSLALLLYLHHAKWSQAAPMAEGGGQNHHEVVKFMDVYQRSYCHPIETLVDIFQEY
PDEIEYIFKPSCVPLMRCGGCCNDEGLECVPTEESNITMQIMRIKPHQGQHIGEMSFLQHNKCEC
RPKKDRARQEKKSVRGKGKGQKRKRKKSRYKSWSVYVGARCCLMPWSLPGPHPCGPCSERRKHLF
VQDPQTCKCSCKNTDSRCKARQLELNERTCRCDKPRR

FIG. 10

Hvegf110

APMAEGGGQNHHEVVKFMDVYQRSYCHPIETLVDIFQEYPDEIEYIFKPSCVPLMRCGGCCNDEG
LECVPTEESNITMQIMRIKPHQGQHIGEMSFLQHNKCECRPKKDR

FIG. 11

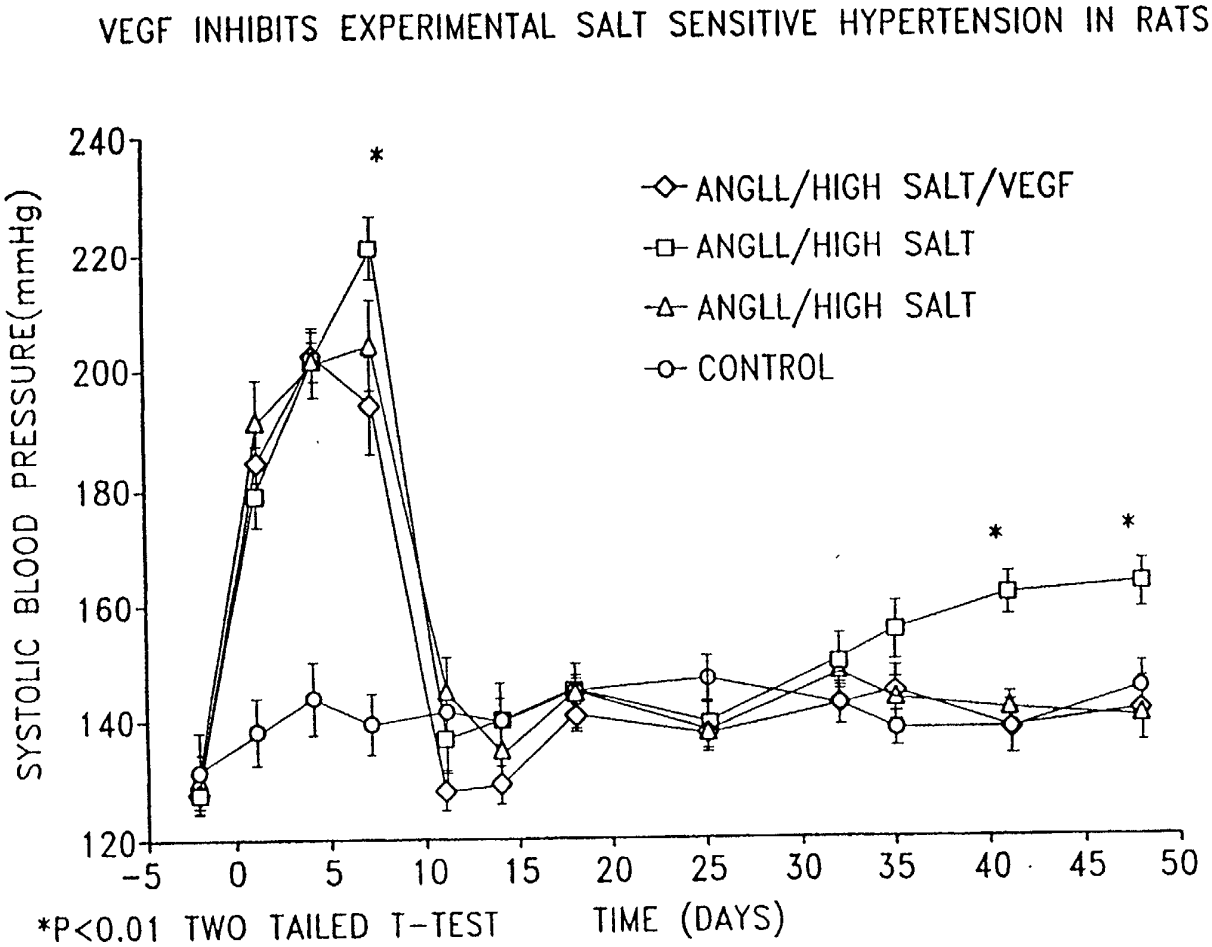
VEGF INHIBITS EXPERIMENTAL SALT SENSITIVE HYPERTENSION IN RATS
SYSTOLIC BLOOD PRESSURE(mmHg)
240
220
200
180
160
140
120
-5
0
5
10
15
20
25
30
35
40
45
50
TIME (DAYS)
ANGLL/HIGH SALT/VEGF
ANGLL/HIGH SALT
ANGLL/HIGH SALT
CONTROL
*
*
*
*P<0.01 TWO TAILED T-TEST

FIG.12